



Build this table using country-style legs and reclaimed lumber for the top. Or you can easily modify it with materials and finishes to suit your style.

PHOTOS BY DAN CARY

Custom Blend

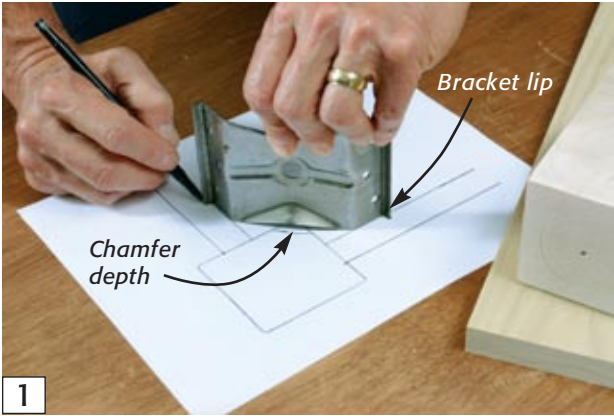
Manufactured legs and hardware make building a coffee table easy

B Y D A N C A R Y

Whether your hot beverage of choice is coffee, tea or a more exotic concoction, chances are you call the low table typically placed in front of a sofa a *coffee table*. The name *tea table* might be more historically accurate — the design originated in the teahouses of the Middle and Far East — but that term doesn't carry the same familiar connotations of traditional American interior design.

True to classic table-design principles, this plan consists of a top, four legs and four skirt boards (also commonly referred to as *aprons*). Whether you're building a coffee table, a dining room table or an end table, the basic components are the same; only the dimensions differ. So once you understand how to build this design, you can use the same techniques to build other types of tables.

To simplify construction, I used manufactured legs and corner brackets from Osborne Wood Products Inc. (see SOURCES ONLINE). The cost of the legs depends on the style and wood species you choose. The soft maple turned country-style legs



1 Trace the leg and skirt-board joint on a piece of paper. Position the bracket with the flat portions of the bracket flush with the skirt boards. Mark the chamfer depth and the location where each bracket lip enters the skirt boards.



2 Use a table saw to cut slots in the skirt boards for the top fasteners and corner bracket lips. First use a miter gauge to crosscut the slots for the corner bracket lips; then cut the slots for the top fasteners.



3 Tilt the band saw table to 45 degrees to cut the stopped chamfer on the top inside corner of each leg. Use a wide blade (at least 3/8 in.) for a straighter cut.

that I chose cost about \$15 each (not including shipping). Using manufactured components is a great way to incorporate design elements that you might not be able to make on your own and enables you to build a one-of-a-kind table for a fraction of what you'd spend to have a piece custom-built for your home.

Custom design

Building your own table gives you the freedom to make it just the right size for your needs and to incorporate custom details such as the storage shelf that my design includes — an especially useful and convenient feature for a coffee table. I also made my table's top unique by using reclaimed lumber (see "New Life for Old Timber," p. 16) from an old beam made of hackberry, a lesser-known member of the elm family. The boards were riddled with nail-hole stains and signs of worm and insect damage — not enough to compromise the integrity of the wood, but just the right amount of rustic character to complement the country-style legs.

There are several ways to attach the skirt boards to the legs: Mortise-and-tenon joints, dowels, metal corner brackets and wood corner brackets are the most common. I chose to use metal brackets because they are easy to install, create a strong connection and are easy to take apart and reassemble. Osborne Wood Products' Web site provides detailed project instructions, including how to install both metal leg brackets and shop-made wood corner brackets.

Building the base

The metal corner brackets fit into slots that you cut in each skirt board and then fasten to a hanger bolt that is screwed into the corner of the leg. Hanger bolts feature two sets of threads: bolt threads in one half and screw threads in the other. The inside corner of the leg is chamfered to make room for the bracket and to provide a flat surface for connecting the hanger bolt.

The first step in construction is to determine the position of the bracket slots on the skirt boards and how deep to chamfer the inside corner of each leg. The position of the skirt boards is up to you. The closer the skirt boards are to the outside edge of the leg, the deeper the chamfer will need to be. Make a pattern of the leg and skirt board connections on paper to determine the position of the bracket and depth of the chamfer (photo 1, top left).

I made the skirt boards first. Using a table saw, I cut the slots for the corner brackets and tabletop fasteners (photo 2). My next step was to cut the opening for the shelf, which is an optional feature. Eliminating the shelf from your design will simplify construction — you won't need the stretchers or shelf. If you include the shelf, use a scrap of flexible lumber such as a strip of 1/8-in. plywood to draw the arc for the shelf opening. I cut the opening with a band saw.

There are several ways to cut the stopped chamfer on the inside corner of each leg. I used a band saw (photo 3). If the chamfer is not too deep, you can use a router with a piloted chamfer bit. A third option is to use a handsaw.

The hanger bolt must be centered across the chamfer. It also

COFFEE TABLE

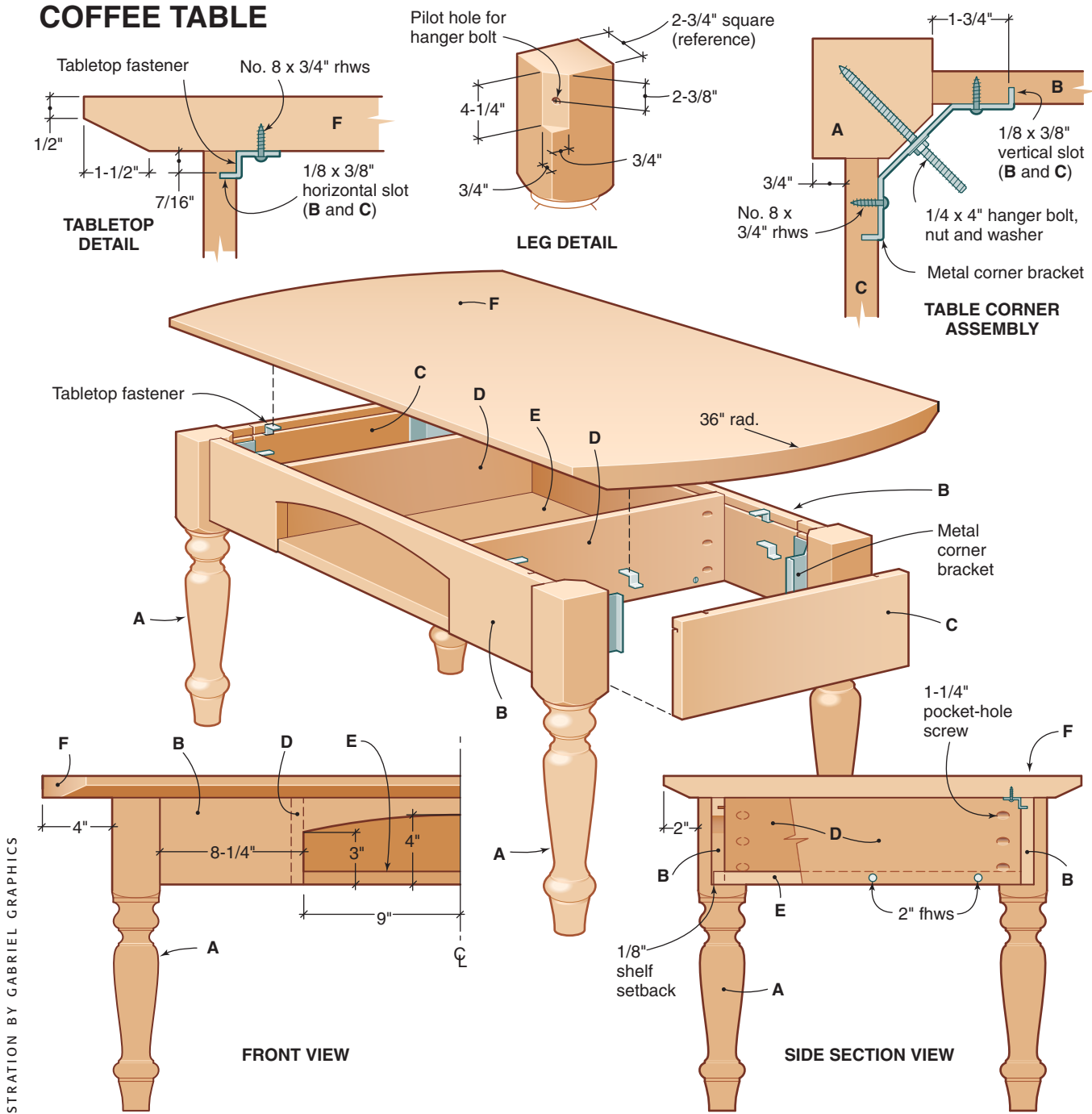


ILLUSTRATION BY GABRIEL GRAPHICS

MATERIALS AND CUTTING LIST

KEY	NO.	DESCRIPTION	SIZE
A	4	Legs	2-3/4 x 2-3/4 x 18 in.
B	2	Front/back skirts	3/4 x 5 x 34-1/2 in.
C	2	End skirts	3/4 x 5 x 14-1/2 in.
D	2	Stretchers	3/4 x 5 x 18 in.
E	1	Shelf, birch plywood	3/4 x 17-5/8 x 18 in.
F	1	Top	1-1/4 x 24 x 48 in.

SHOPPING LIST

Material for 2 x 4-ft. tabletop (see text)
1x6 x 8-ft. boards for skirts (2)
3/4 x 17-5/8 x 18-in. plywood for shelf
18-in.-long manufactured table legs (4)
Metal corner brackets (4)
No. 8 x 3/4-in. round-head wood screws (24)
2-in. flathead wood screws (8)
1-1/4-in. coarse-thread pocket-hole screws (12)
1/4-in.-dia. x 4-in. hanger bolts (4)
1/4-in. nuts and washers (4)
Tabletop fasteners (8)

must be high enough on the leg so that the bracket is not exposed under the skirt board. The brackets I used are 4 in. tall. I drilled a 5/16-in.-dia. pilot hole 2-3/8 in. down from the top of each leg. Then I drove a hanger bolt into the hole until only the bolt threads were left exposed (photo 4).

The next step is to loosely assemble the legs and skirt boards and then slip the corner brackets over the hanger bolts and into the slots in the skirt boards. Fasten the corner brackets to the skirt boards; then attach the legs to the corner brackets (photo 5).

It is a good idea to wait until the legs and skirt boards are assembled before cutting the stretchers to length. Measure the distance between the front and back skirt boards to find the exact length of the stretcher boards. Then cut the stretchers to length and bore three pocket-screw holes in each end.

I used a scrap of 3/4-in. plywood for the shelf. I cut the shelf to final size and attached heat-activated edge banding (available at most home centers and woodworking stores) to the front edge. Then I installed the stretchers and shelf (photo 6).

Top options

I built a solid top for this table, but if you're not comfortable with the techniques required for this task, you have other options. For example, you can have a piece of hardwood-veneer plywood cut to size at most home centers and apply heat-activated edge banding to cover the cut edges. Or you can have a piece of natural stone cut to fit. You can also reuse a top from an old table or buy one at a furniture outlet.

My first step in making the top was to prepare the boards for gluing. I used four boards to make the 24-in.-wide top. The boards were rough-planed and flat when I got them, so I only needed to plane them down to the final thickness, square up the edges and cut them to size. Next, I cut biscuit slots in all of the mating edges and then applied the glue, inserted the biscuits and clamped the boards together.

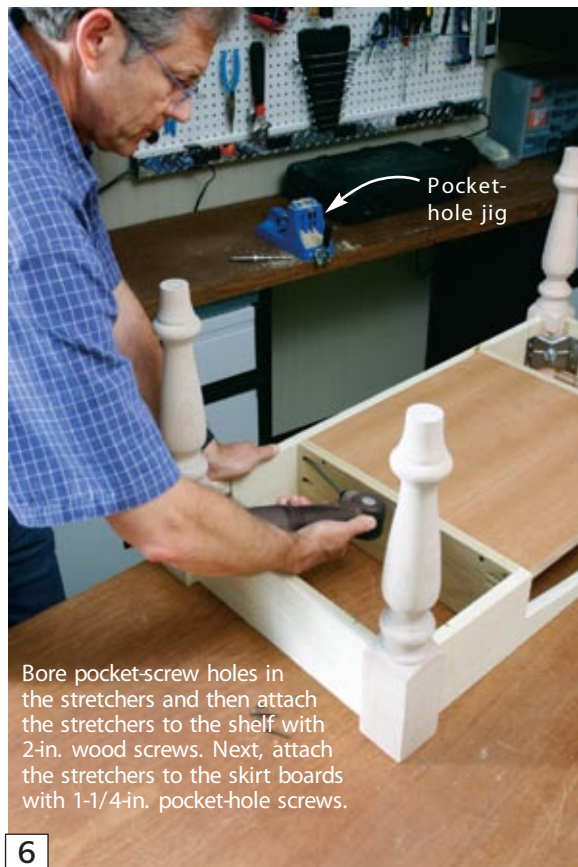
Once the glue had cured, I added a chamfer detail to the bot-



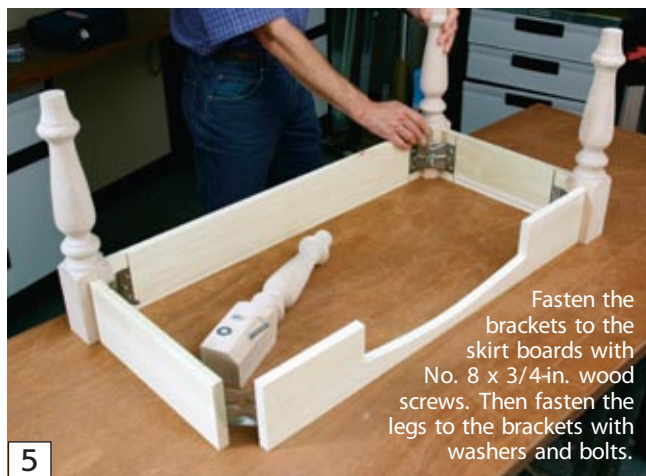
The trick to driving a hanger bolt is to use two nuts on the bolt threads (inset). Tighten the second nut down on the first nut to lock them together so that the bolt turns instead of the nuts.

tom long edges of the top using a table saw (photo 7). Chamfering this edge makes the top appear less heavy and makes access to the shelf easier.

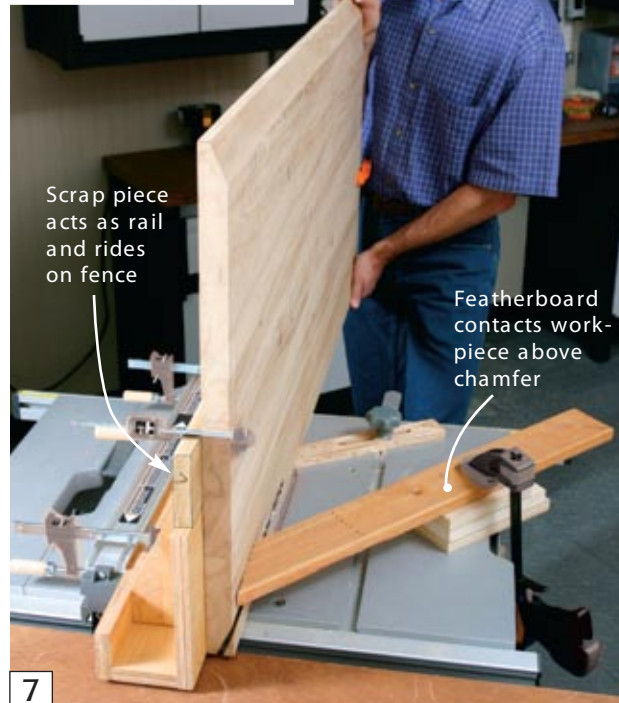
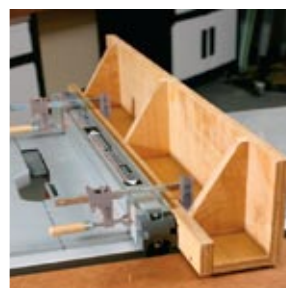
Next, I cut radii in the ends to ease the corners while still leaving flat edges along the sides that people would normally sit next to. To locate the center points for the radii, measure 36 in. from each end and find the center between the sides. Cut the radii using a band saw or jigsaw.



Bore pocket-screw holes in the stretchers and then attach the stretchers to the shelf with 2-in. wood screws. Next, attach the stretchers to the skirt boards with 1-1/4-in. pocket-hole screws.



Fasten the brackets to the skirt boards with No. 8 x 3/4-in. wood screws. Then fasten the legs to the brackets with washers and bolts.



Cutting a shallow chamfer along a long edge requires a few special precautions. To help support the workpiece, attach a tall fence extension to the existing fence (inset). Clamp a long scrap to the workpiece to ride like a rail along the top of the fence. And use two featherboards to help keep the workpiece from tilting.



Fasten the top to the base with tabletop fastener clips. Drill 1/8-in.-dia. x 1/2-in.-deep pilot holes for each screw, being careful not to drill through the tabletop.

NEW LIFE FOR OLD TIMBER

Reusing lumber is not a new idea. I got the stock for my tabletop from Barnwood of Minnesota, a reclaimed-lumber business owned by Club member Jim Hildebrandt. Jim says some of the lumber he acquires shows signs that it had been reclaimed from a previous building and reused to construct the building being salvaged — making it twice-reclaimed material.

Reclaiming lumber is a regional industry, meaning that the common species that are reclaimed tend to be native to that region. For example, the majority of the wood that Jim finds in central Minnesota is white oak, red and yellow elm and white pine, whereas a dealer in Washington primarily reclaims Douglas fir.

The best way to find reclaimed material is to contact a dealer who can steer you to the best resources for the species and types of lumber you need. An online search for “reclaimed lumber barn wood” is another good starting point. — DC



Reclaimed-lumber dealer Jim Hildebrandt is part woodworker, part historian and part scavenger. He acquires lumber from old structures such as barns, grain elevators and warehouses and transforms it into architectural elements ranging from mantels to flooring.

PHOTO BY MARK MACEMON

Finishing and assembly

You can choose any furniture-grade finish for the top and base. Because the legs, skirts and top of my table are built from three different species of solid wood and the shelf is a piece of plywood, I had no intention of trying to match the wood tones. To play up the beauty of the reclaimed lumber, I applied clear satin polyurethane to the top and sprayed three coats of antique-white paint on the base.

After the finish cures, the last step is to fasten the top to the base with tabletop fastener clips (photo 8). Then grab a few books and magazines and a hot cup of something — just please remember to use a coaster. ♦

SOURCES ONLINE

For online information, go to www.HandymanClub.com and click on SOURCES ONLINE.

Barnwood of Minnesota Inc. (reclaimed lumber), (320) 864-3034

Kreg Tool Co. (pocket-hole jigs and screws), 800-447-8638

Osborne Wood Products (English country legs, No. 1320 corner-bracket set, No. 901), 800-849-8876

Rockler Woodworking (tabletop fasteners, No. 34215), 800-279-4441